

EU's Renewable Energy Industry Development and H1 2026 Fastener Demand

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Europe's renewable energy transition is creating new opportunities for industrial fastener manufacturers and distributors. However, the relationship between expanding renewable capacity and fastener demand is more complex than installation figures alone suggest.

Renewable Energy Expansion and the Fastener Industry

The European Union's renewable energy industry entered 2026 under two powerful but sometimes conflicting pressures: the need to accelerate energy independence and the challenge of maintaining investment in an increasingly complex electricity market. For manufacturers and distributors of industrial fasteners, these developments present opportunities extending far beyond the simple supply of bolts, nuts, screws and washers.

Wind turbines, solar photovoltaic installations, energy storage facilities and electricity transmission infrastructure all require mechanical fastening systems. As projects become larger, operate in more demanding environments and face stricter reliability requirements, the commercial importance of fastening technology increases.

The first half of 2026 demonstrated both the opportunities and uncertainties of this transition. According to WindEurope, European countries installed 8.8 GW of new wind energy capacity during H1 2026, approximately 30% more than in the corresponding period of 2025. Of this total, 7.1 GW was installed within the EU's 27 member states.

Meanwhile, SolarPower Europe's mid-year assessment indicated that EU solar photovoltaic installations reached at least 33.8 GW, compared with 33.2 GW in H1 2025, representing growth of approximately 1.9%.

EU Renewable Energy Development: Progress and the Remaining Gap

The European Union has established a binding target requiring renewable energy to account for at least 42.5% of gross final energy consumption by 2030, with an additional ambition to reach 45%. According to provisional Eurostat data published in July 2026, renewable energy represented 26.2% of EU gross final energy consumption in 2025, compared with 25.2% in 2024.

This leaves a gap of 16.3 percentage points between the 2025 achievement and the minimum 2030 target. Closing that gap would require an average annual improvement of approximately 3.3 percentage points between 2026 and 2030, substantially faster than the one-percentage-point improvement recorded in 2025.

Electricity generation presents a more advanced picture. Eurostat reported that renewable sources produced 45.5% of EU electricity in the first quarter of 2026, increasing from 42.7% in Q1 2025. In the second quarter, renewables supplied 54.1% of EU electricity generation, slightly below the 54.3% recorded in the corresponding quarter of 2025. Solar represented 41.6% of renewable electricity production during Q2, followed by wind at 27.7% and hydropower at 22.6%.

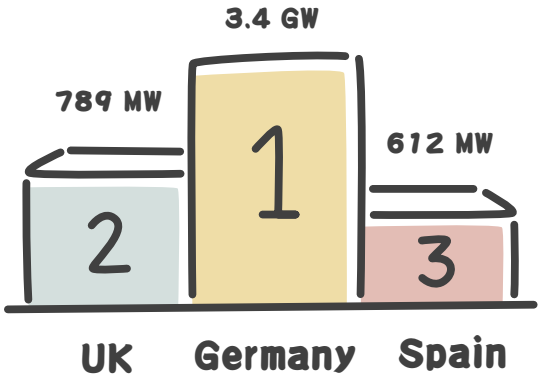
Wind Energy: The Strongest Growth Signal in H1 2026

Wind energy delivered one of the clearest expansion signals during the first half of 2026. WindEurope's September 2026 report identified 8.8 GW of new installed capacity across Europe, consisting of approximately 6.5 GW of onshore wind and 2.3 GW of offshore wind.

Germany led new installations with 3.4 GW, followed by the United Kingdom with 789 MW and Spain with 612 MW. Overall, the EU accounted for 7.1 GW of the European total.

By mid-2026, Europe's cumulative wind capacity exceeded 311 GW, comprising approximately 270.5 GW onshore and 40.9 GW offshore. The EU accounted for nearly 252 GW of this installed base.

▼ Top 3 Ranking of European Wind Turbine Capacity Holders



WindEurope also reported €9 billion in capital raised for new wind projects in H1 2026, financing approximately 5.2 GW of future capacity. In addition, firm turbine orders reached 10.6 GW, although this was approximately 12% below the 12 GW ordered during H1 2025. The contrast is commercially important: installations were rising while new turbine orders were declining.

A supplier evaluating only newly installed capacity might conclude that purchasing demand was accelerating throughout the supply chain. Turbine-order data, however, suggest a more cautious interpretation. Some of the equipment installed in H1 originated from investment and procurement decisions made in earlier periods.

Table 1. Essential Distinction Between 4 Separate Indicators

Indicator	H1 2026, Europe	Meaning for Fastener Suppliers
Wind Capacity Installed	8.8 GW	Equipment entering service
Firm Turbine Orders	10.6 GW	Future manufacturing pipeline
Capacity Financed	5.2 GW	Potential upcoming procurement
Wind Capacity Awarded Support	17.2 GW	Longer-term project opportunity

Source: WindEurope Autumn 2026. These indicators represent different project stages and must not be added together to calculate demand.

Offshore Wind: Higher Technical Requirements and Supply-Chain Opportunities

The offshore wind industry deserves particular attention because its fastening requirements differ substantially from those of many conventional industrial applications. According to WindEurope's offshore wind mid-year statistics, 182 turbines with a combined capacity of approximately 2.3 GW were connected to European electricity networks during H1 2026, across 9 wind farms. This was approximately 3 times the offshore capacity connected during H1 2025.

Solar Photovoltaics: High Installation Volumes but Slower Growth

Solar photovoltaic energy remained the EU's largest source of new renewable generation capacity during H1 2026. According to SolarPower Europe's mid-year analysis, EU member states installed at least 33.8 GW of solar capacity between January and June 2026, approximately 600 MW more than in the corresponding period of 2025. Despite this increase, the association forecast total annual installations of approximately 68.1 GW in 2026, compared with 69.6 GW in 2025. If realised, this would represent an annual decline of approximately 2.2%.

Fastener Demand in Europe's Renewable Energy Industry

The expansion of renewable energy infrastructure is creating demand for specialised industrial fasteners, particularly in wind turbines and photovoltaic mounting systems. However, the two markets differ considerably in product specifications, fastening quantities and market value. According to Fortune Business Insights, the global wind power fastener market was valued at approximately US$1,133 million in 2025 and is projected to reach US$1,228 million in 2026 (EU market equivalent of approximately US$112 million annually), representing annual growth of approximately 8.4%. The market is forecast to reach US$2,342 million by 2034, equivalent to a compound annual growth rate of 8.4% between 2026 and 2034.

Meanwhile, Grand View Research estimated the global solar fasteners market at approximately US$3.83 billion in 2024, with a projected value of approximately US$4.5 billion in 2026 (EU approximately US$455 million annually). The market is expected to reach US$8.38 billion by 2033, representing a forecast CAGR of 9.1% between 2025 and 2033. The EU Fastener estimates are presented in **Table 2**.

Table 2. EU Fastener Market Estimates

Fastener Market	Global Market Value, 2026 Forecast	EU Annual Market Equivalent	EU H1 2026 Installation-Based Equivalent
Wind Fasteners	US$1,228m	US$112m	US$52.9m
Solar Fasteners	US$4,500m	US$455m	US$229.1m
Total	US$5,728m	US$568m	US$282.0m

Conclusion: A Growing Market That Requires a More Selective Strategy

Europe's renewable-energy industry continued expanding during the first half of 2026, with particularly strong wind installation growth and sustained high volumes of solar deployment.

The EU installed approximately 33.8 GW of solar capacity and 7.1 GW of wind capacity during the period. Across geographical Europe, wind installations reached 8.8 GW, supported by substantial investment and ongoing government auction activity. These developments create opportunities for manufacturers and distributors of industrial fastening products. However, the market cannot be understood through installed capacity alone.

A gigawatt of offshore wind, a gigawatt of rooftop solar and a gigawatt of ground-mounted photovoltaic generation represent very different fastening requirements. Project design, equipment procurement schedules, manufacturing location, technical specifications and maintenance requirements all influence the actual demand for bolts, nuts, screws, anchors and other fastening components.

The most promising opportunities therefore lie not simply in supplying more fasteners, but in identifying where customers require reliability, technical performance, efficient assembly and dependable delivery. For manufacturers, high-performance wind applications and specialised corrosion-resistant fastening systems may provide opportunities to differentiate through engineering capabilities. For distributors, solar mounting systems, grid infrastructure and maintenance operations may offer broader commercial access.

Europe's renewable-energy transition is not one homogeneous market. It is a collection of specialised industrial supply chains, each with different purchasing requirements and competitive conditions. The companies most likely to benefit will be those that translate renewable-energy expansion into specific, technically qualified customer opportunities rather than treating headline installation growth as a direct forecast of fastener sales. ■

[1] *https://www.pv-magazine.com/2026/09/08/eu-deploys-33-8-gw-of-solar-in-h1*
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